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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,742	02/26/2002	Koyu Yamanoi	TI-32716	8431

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EXAMINER	
GIESY, ADAM	

ART UNIT	PAPER NUMBER
2651	

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/085,742	YAMANOI ET AL.	
	Examiner	Art Unit	
	Adam R. Giesy	2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 February 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 6, 7 and 8 should be designated by a legend such as --Prior Art--, because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueki (US Pat. No. 6,249,494 B1) in view of Yamamura (US Pat. No. 4,572,965).

Regarding claim 1, Ueki discloses an optical disk determination circuit that determines the kind of optical disk by detecting the distance from the light beam irradiation plane to the data recording layer (see Figure 3), comprising: an input terminal that inputs received light signals, which correspond to the reflected light of a light beam, while the focal position changes in the depth direction of an optical disk (Figure 16, element 2); a comparator circuit that detects a first

reflection signal at the surface of the optical disk, and a second reflection signal at the recording layer of the optical disk by comparing the signal with a reference voltage (Figure 18, element 60); and a calculation circuit that calculates the distance from the surface of the optical disk to the recording layer using the time difference between the aforementioned first reflection signal and the aforementioned second reflection signal (see Figure 7). Ueki does not disclose a clamp circuit that clamps the bottom level of the aforementioned received light signals at a specified level, and outputs this as a bottom level clamp signal.

Yamamura discloses a circuit for detecting the existence of an information signal that uses a clamp circuit. Yamamura also discloses that the clamp circuit (Figure 5, element 12) is used to bring the input signal to a predetermined level (see column 5, lines 55-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the discriminating circuit as disclosed by Ueki with the clamp circuit as discloses by Yamamura, the motivation being in order to eliminate noise from the input signal and produce a more stable discriminating technique.

Regarding claim 2, Ueki and Yamamura disclose all of the limitations of claim 1 as discussed in the claim 1 rejection above and further, Ueki discloses a filtering circuit that conducts specified signal processing in relation to the signals input from the aforementioned input terminal (see low pass filters 28 and 46 in Figure 16). Ueki does not disclose the use of the amplifier circuit following the filter circuits and preceding the clamp circuit.

Yamamura discloses an amplifier circuit (Figure 5, element 3) immediately before the clamp circuit (12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the amplifier and clamp circuit into the signal processing circuit as disclosed by Ueki, the motivation being in order to better stabilize the signal input by the light for use in the identification of the medium.

Regarding claim 3, Ueki and Yamamura disclose all of the limitations of claim 2 as discussed in the claim 2 rejection above and further, Ueki discloses a filter circuit that conducts specified signal processing in relation to the signals input from the aforementioned clamp circuit (see high pass filter 58 in Figure 18).

Regarding claim 4, Ueki and Yamamura disclose all of the limitations of claim 1 as discussed in the claim 1 rejection above and further, Ueki discloses that the determination circuit determines whether an optical disk is a CD or a DVD corresponding to the distance from the surface of the optical disk to the recording layer (see column 4, lines 51-64 and also column 5, lines 21-31).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Lee (US Pat. No. 6,466,531 B1) discloses a disk discrimination device that utilizes comparators, a time difference detector in conjunction with photodetectors for the light beams, and an integrator.

b. Inoue et al. (US Pat. No. 6,262,957 B1) discloses a method of discrimination between optical disk types using a comparator and a calculation circuits for calculating the signal differenced.

c. Kumagai (US Pat. NO. 6,288,987 B1) discloses a disc discrimination method using a comparator and a calculation circuits for calculating the signal differenced.

d. Kamiyama et al. (US Pat. No. 6,487,153 B2) discloses a system for discriminating optical disks.

e. Kobayashi (US Pat. No. 6,278,672 B1) discloses a system and method for discriminating optical disks using the output of detected data from the disk.

f. Park (Us Pat. No. 6,747,931 B1) discloses a method for discriminating the type of an optical recording medium.

g. Kuroda et al. (US Pat. No. 6,603,720 B1) discloses an optical disc discriminating system using peak detection of the output signal.

h. Ono et al. (6,822,936 B2) discloses a disc discriminating method using the amplitude of the push-pull tracking error signal.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam R. Giesy whose telephone number is (571) 272-7555. The examiner can normally be reached on 8:00am- 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARG 4/7/2005

W. R. YOUNG
PRIMARY EXAMINER